U.S. Serial No. 10/073,101 Group Art Unit No.: 2882

In the Claims

1. (Currently Amended) An integrated optical circuit comprising:

an input waveguide;

an imaging multimode interference device adapted to substantially remove all modes but a fundamental mode of an optical signal received from said input waveguide; and

an optical power splitter structure in optical communication with said imaging multimode interference device;

wherein said multimode interference device includes a primary output in optical communication with said optical power splitter structure and a secondary output in optical communication with a dump port.

Claims 2-4 (Cancelled)

5. (Currently Amended) A method for suppressing propagating lateral waveguide field oscillations at the input of an optical power splitter structure comprising,

fabricating an imaging multimode interference device in optical communication with said optical power splitter structure, wherein said multimode interference device includes a primary output in optical communication with said optical power splitter structure and a secondary output in optical communication with a dump port; and

said-method-further comprises receiving an error signal from said dump port and monitoring said error signal for a substantial change.

Claim 6 (Cancelled)

7. (Currently Amended) The method of claim 5 wherein said optical power splitter structure is a component of [[a]] an interferometric modulator.

U.S. Serial No. 10/073,101 Group Art Unit No.: 2882

8. (Original) The method of claim 7 wherein said interferometric modulator is a Mach-Zehnder modulator.

Claim 9 (Cancelled)

10. (Currently Amended) An integrated optical circuit comprising:

a semiconductor optical amplifier; having an angled output; and

an angled output, the angle of which is non-perpendicular with respect to the direction of optical propagation; and

an imaging multimode interference device between said semiconductor optical amplifier and said angled output.

- 11. (Currently Amended) The integrated optical circuit of claim 10 wherein said further has comprising an angled input, the angle of which is non-perpendicular with respect to the direction of optical propagation, and said imaging multimode interference device is a first imaging multimode interference device and said integrated optical circuit further comprises a second imaging multimode interference device between said semiconductor optical amplifier and said angled input.
- 12. (Currently Amended) An integrated optical circuit comprising:

a waveguide device; having an angled output; and

an angled output, the angle of which is non-perpendicular with respect to the direction of optical propagation; and

an imaging multimode interference device between said waveguide device and said angled output.

Claims 13-15 (Cancelled)

U.S. Serial No. 10/073,101 Group Art Unit No.: 2882

16. (Currently Amended) An optical attenuator comprising:

an input waveguide;

an imaging multimode interference device adapted to substantially remove all modes but a fundamental mode of an optical signal received from said input waveguide; and

an electrode adapted to apply a bias voltage to a surface of said imaging multimode interference device;

wherein said imaging multimode interference device is a 1-to-1 device having a single input and a single output.

17. (New) The optical circuit of claim 1, wherein said multimode interference device includes two said secondary outputs, each of which is in optical communication with a respective said dump port.

18. (New) The method of claim 5, wherein said multimode interference device includes two said secondary outputs, each of which is in optical communication with a respective said dump port, said method further comprising receiving an error signal from each of said dump ports and monitoring said error signal for a substantial change.